United Nations COPUOS/T.636

# Committee on the Peaceful Uses of Outer Space

*Unedited transcript*

**Fifty-fourth session**

636th Meeting
Tuesday, 7 June 2011, 10 a.m.
Vienna

*Chairman:* Mr. Dumitru Dorin PRUNARIU *(Romania)*

*The meeting was called to order at 10.13 a.m.*

**The CHAIRMAN** Good morning distinguished delegates. I now declare open the 636th meeting of the Committee on the Peaceful Uses of Outer Space.

This morning we will continue and hopefully conclude our consideration of agenda item 6, implementation of the recommendations of UNISPACE III; item 7, report of the Scientific and Technical Subcommittee on its forty-eighth session; and, item 10, space and society. We will also begin our consideration of agenda item 15, other matters.

At the request of some delegations we will re-open agenda item 4, general exchange of views, to listen to a statement as requested by a delegate and re-open item 8, report of the Legal Subcommittee, to invite the Secretary-General of UNIDROIT to address the Committee.

Following the plenary there will be three technical presentations. The first, by a representative of Japan, entitled 'Bridging space and the society - recent educational activities in Japan'. The second, by a representative of Ukraine, entitled 'Global Space System of the Seismic Activity Monitoring'. The third, by a representative of Australia, entitled 'The Australian Space Research Programme'. In the evening, there will be a reception and exhibition hosted by the European Space Policy Institute at 7 p.m. at their premises.

I would like to inform delegates that, today from 2-5 p.m., the Action Team 14 on near-Earth objects will hold its meeting in Room M7 to continue its work on the draft recommendations for an international response to the near-Earth object impact threats.

There will also be consultations on space and ecosystem management, organized by the delegation of Austria, today from 2-3 p.m. in Room M0E19. Also during lunchtime today, starting at 2 p.m., two videos will be screened in this meeting room by Indonesia and Turkey. Delegations are kindly reminded to provide the Secretariat with written amendments to the provisional list of participants, which was distributed as CRP.2, by today, close of business, so that the Secretariat can finalize the list of participants.

**General exchange of views** (agenda item 4)

Distinguished delegates, I would like now to re-open agenda item 4, general exchange of views and give the floor to the distinguished representative of Saudi Arabia.

**Mr. M. TARABZOUNI** (Saudi Arabia) (*interpretation from Arabic*) In the name of God, the compassionate and the merciful. Chairman, thank you. I would like to start off by reiterating our conviction that in your hands and with your wisdom and experience our meeting is indeed well served and it certainly will be successful. I would like to assure you of the support of my delegation and I would like to express my warm thanks to the head of OOSA and her



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staff for all the efforts that have been made to prepare our successful meeting.

Since the first flight over 50 years ago, we have had ever so many space programmes and activities which have been successful which have taken place and, over the span of time, the Committee has played a very important role in ensuring the use of outer space for peaceful purposes. Now that we are celebrating the fiftieth anniversary of this Committee we hope that this successful work will continue, develop, be pursued, to the benefit of mankind and it is important to take into due account the contributions of the subcommittees of COPUOS to that effect.

Yemen, Jordan, Palestine and Saudi Arabia, and all of the other States which have acceded to the status of observer, stands strong in support of the Committee in promoting the exploitation of outer space for the purposes of sustainable development for the peace and prosperity of all of mankind.

Our country has steadfastly supported the work of our Committee which has sought to implement the provisions of the statutes and to ensure the deployment of peaceful activities in exploiting outer space. This requires us all to reaffirm the universal nature of the activities in question, this alone will ensure the peaceful exploitation of outer space. It is necessary for member States to be constantly involved in the work that is taking place along these lines and it is necessary for the Committee to take on board the concerns of the international community which wishes that efforts be made to ensure UNGA resolution 58/36 that outer space will be exclusively exploited to peaceful ends.

We have been involved in peaceful R&D work in our centre, we have made use of Landsat-3 imagery which has focused imagery from the Mecca, those images have been displayed in the exhibition which is to be found in the centre. We have also refined various satellites, Sat-3 which is a commercially viable and operational satellite. We have launched R&D work for geographical purposes and topological purposes. Saudi Arabia has given privileged priority to cooperation at an international level with the US, Russia, Kazakhstan, Ukraine, and ever so many other countries. We have cooperative agreements which have been concluded and this in support of the international research effort on the Moon and other celestial bodies.

In 2009, we concluded a memorandum of agreement with NASA to implement the deployment of space technologies. We have another project with NASA and Stanford University in California having to do with the work on the space centre which involves scientists from the Abdulaziz Centre, this programme has already started producing results. We have joint projects with NASA, as I have said, along with Stanford and this work makes use of our satellites in synchronous satellites within the STAR network and initiative. As from 2012 more satellites will be launched in order to pursue the work with Stanford and NASA.

We would like to recall that the exploration of outer space for us is based on the agreement of principle which governs the cooperation of States in the exploration of outer space. The geostationary orbit is a limited resource and a very valuable one for all States and I would like to express our concern as to the access of States to that limited resource. It is necessary to bear in mind that we must make use of the range of frequencies which is a limited resource. We must also bear in mind the decisions made within ITU in this regard as well as in other relevant fora of the United Nations and give priority to systems which favour the promotion of sustainable development and the achievement of the MDGs.

Space debris and the risk of collision are matters which are of concern when one considers sustainability of outer space activities. We are satisfied to see that a working group has been set up which will be focusing on sustainability and viability of long-term efforts in outer space in a very specific fashion because we do believe that the risks inherent in these activities must be borne in mind as well as the importance of guaranteeing access to all States to this limited resource. It is necessary to engage in space debris mitigation efforts, this is of capital importance, it is necessary to bring research to bear as well as proper project activities and this implementation of UNGA resolution 62/217. We believe that it is necessary, in this connection, to develop an adequate, appropriate long-term strategy with regulatory texts which would regulate safety provisions with regard to nuclear energy power sources in outer space.

As for space climate. These are issues which are of common interest to us all because this has a bearing and a connection to solar climate and outer space which is the province of all mankind. It is necessary for us to coordinate our efforts in order to properly implement outer space observation and climate observation. The Abdulaziz Research Centre has developed a strategy in order to set up a centre which is specifically devoted to this sort of study, the observation of outer space climate.

We would like to thank delegates who have spoken before us, we would like to thank those

delegations for their wise input, which we certainly value, we hope that the Lord will bless our assembly and will ensure that our forum will be able to debate properly without any political considerations. Thank you.

**The CHAIRMAN** I thank the distinguished representative of Saudi Arabia for his statement.

Is there any other delegation wishing to speak under this agenda item? I see none. We have therefore concluded our consideration of agenda item 4, general exchange of views.

Now distinguished delegates, we re-open agenda item 8, report of the Legal Subcommittee, to invite the Secretary-General of UNIDROIT to address the Committee.

**Mr J. ESTRELLA-FARIA** (UNIDROIT) Thank you Mr. Chairman. The International Institute for the Unification of Private Law (UNIDROIT) is grateful for the invitation it has received from the UN Office for Outer Space Affairs to report to the fifty-fourth of the Committee on the Peaceful Uses of Outer Space on the developments that have taken place since the fiftieth session of the Legal Subcommittee concerning the preliminary draft protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets.

Allow me in the first place, Mr. Chairman, to wish this body every success in the continuation of its deliberations.

Mr. Chairman, the highly successful Cape Town Convention seeks to promote an expendable ability of a particular finance technique, asset basic financing, in respect of a particular class of high value mobile equipment normally moving from country to country or beyond any national jurisdiction in the ordinary course of business. It was also recognized that a new asset based financing regime of the Cape Town Convention may not be needed by large AAA satellite operators but rather among those companies and smaller operators that are too often deprived of access to the capital markets without which their chances of mounting a commercial venture were extremely limited. The goal of the new regime is to promote the asset based financing technique in this year precisely because of its proven economic benefits, the central element of which consists of the creditor's ability to go against the asset in the event of his debtor's default.

Satellite industry analysts take the view that the cost and quality of future global space-based services, including manufacturing, operating _____(?) services will be largely influenced by emerging industry players. Nearly all analysts agree that new generation of space activity will include non-traditional stakeholders, sometimes referred to as the new space community, small private companies, new entrepreneurial space ventures and non-profit organizations. This, Mr. Chairman, puts policy makers and in particular States in a unique position to provide incentives through the creation of a conducive regulatory environment for such new commercial space players. The planned space protocol, if it is submitted, has an important role to play in this process given the substantial reduction that it is expected to produce and the costs faced by those new players wishing to enter the commercial space sector through greater use of the asset based financing technique.

In this connection, we are pleased to be able to report that, in the light of the excellent progress made by the Committee of Governmental Experts for the preparation of the draft protocol to the Cape Town Convention at its fifth and final session held in Rome from 21-25 February 2011, notably the resolution of key outstanding issues, the UNIDROIT Governing Council at its ninetieth session held in Rome from 9-11 May 2011, authorized the secretariat to transmit the draft protocol established at the conclusion of the fifth session of that Committee to a diplomatic conference for adoption.

The secretariat is in close touch with the member governments at the present time regarding the host of the diplomatic conference on its territory and expects to be in a position shortly to announce the dates for, and venue of, the conference. We are working on the basis that the conference will be held in the first quarter of 2012. We are aiming to get out invitations for the conference by this July, invitations will be addressed not only to all member States of UNIDROIT but, in line with the terms of resolution 2 passed by the Cape Town diplomatic conference in 2001, to all members of the United Nations that are not members of UNIDROIT. As members of UNCOPUOS know, invitations to participate in sessions of the UNIDROIT Committee have always been sent out, not only to UNIDROIT members but also to UNCOPUOS members. Apart from the opportunity this provides for UNCOPUOS to keep abreast of progress in development of the draft protocol, it has also provided an invaluable means of ensuring full compatibility between the draft space protocol and the treaties and principles on outer space prepared under auspices of the United Nations.

In conclusion, Mr. Chairman, permit me on behalf of UNIDROIT, to reiterate how greatly we value the input of UNCOPUOS members to the development of the space planned protocol and we look forward to continue to work closely with them in the final stages of this process and in particular in the forthcoming diplomatic conference. Thank you Mr. Chairman.

**The CHAIRMAN** I thank the distinguished representative of UNIDROIT for his statement.

Are there any other delegations wishing to speak under this agenda item 8? I see none. We have therefore concluded our consideration on agenda item 8, the report of the Legal Subcommittee.

**Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III)** (agenda item 6)

Now we continue our consideration of agenda item 6, implementation of the recommendations of UNISPACE III.

Is there any delegation wishing to speak on this agenda item at this morning's session? I see none.

Under this agenda item, I would first like to put forward for endorsement the draft contribution of the Committee on the Peaceful Uses of Outer Space to the United Nations Conference on Sustainable Development (UNCSD): harnessing space-derived geospatial data for sustainable development, as contained in CRP.9.

Do I take it that the Committee endorses the draft contribution of the Committee on the Peaceful Uses of Outer Space to the United Nations Conference on Sustainable Development (UNCSD): harnessing space-derived geospatial data for sustainable development, as contained in CRP.9?

I hear no objections.

*It is so decided.*

**Space and society** (agenda item 10)

Distinguished delegates, I would now like to continue our consideration with agenda item 10, space and society.

The first speaker on my list is the distinguished representative of Japan.

**Ms. R. MISAKI** (Japan) Mr. Chairman, distinguished delegates. On behalf of the Japanese delegation I am pleased to have this opportunity to address this session. My delegation also commemorates the fiftieth anniversary of COPUOS and human space flight once again. To promote the use and _____(?) of space it is necessary to _____(?) and secure _____(?) human resources and gain advanced knowledge and practical development experiments in space science and are capable of overlooking _____(?) universal point of view.

Japan implements numerous efforts in the area of space education to execute UNISPACE III recommendations, such as keeping stewardship to the action team of capacity building and works to promote space utilization participating in BSSI, BSTI and ISWI _____(?). One such example is the annual celebration of World Space Week. Numerous educational activities for young people take place each year during this special week. Japan also carries out numerous activities to strengthen international cooperation.

For instance, Japan continues to contribute to the regional framework for cooperation in space education through the Asia Pacific Regional Space Agency Forum (APRSAF). Through its space education and awareness working group, APRSAF has been taking concrete action to offer opportunities for schoolchildren, teachers and educators, to participate in space education activities such as the annual regional water rocket event and poster contest.

Japan has also contributed to the United Nations Programme on Space Applications activities related to small satellites. In cooperation with UNOOSA, the Kyushu Institute of Technology has initiated a long-term fellowship programme on nano satellite technology. We introduced this programme at the Scientific and Technical Subcommittee this February. Following this, two application rounds were held with a total of 35 applicants from 18 countries. The projects are planned to start this October.

In addition to this fellowship programme, we have the STAR programme which is designed to support capacity building for developing micro satellites. This programme has _____(?) researchers and engineers from India, Indonesia, Korea, Malaysia, Thailand and Viet Nam. Based on various requests from participating countries, JAXA programme is now shifting to a new cooperation framework among Japanese universities called University International

Formation Mission (UNIFORM). The UNIFORM started last year and aims to contribute to several policy objectives such as the exploitation of new markets, promotion and space diplomacy and training of domestic and international human resources on space technology.

_____(?) combination of research and cooperate capacity building with emerging space countries, such as several Asian countries. JAXA established the Kibo utilization of _____(?) for Asia in July 2010. The aim of this office is to promote cooperation with Asian countries and the utilization of the Japanese experiment module of ISS, called Kibo. One its recent activities is the Asian seed project which is a joint project between JAXA and the space agencies of Indonesia, Malaysia, Thailand and Viet Nam. Furthermore this summer, the Japanese astronaut Dr. Horikawa, who is currently on board the ISS, is going to conduct some experimental demonstrations to answer scientific questions from Asian children. Details of these activities will be introduced during today's presentation.

We believe that these activities will raise children's interest in space environment and also promote the future cooperation in space utilization.

Mr. Chairman, our delegation is pleased that _____(?) excellent educational initiatives have been presented under this agenda item over the past several years and _____(?) exchange of information and experience is very important and should continue. It might also be useful to forecast our efforts through this Committee by identifying a few specific priority areas that could have greater impact on enhancing space education.

Japan has come to think that it is essential to have a mechanism for _____(?) space education activities _____(?) and is independent from any assistance and provides a variety of materials and goods for space education to developing countries in response to their requests. Japan also thinks that we should discuss how to establish such mechanisms as an agenda item in this Committee. Under this agenda item, Japan _____(?) further possibilities to make young people, who may be in space in the near future, interested in outer space by introducing cases of success and also difficulties and overcoming _____(?) during COPUOS. Thank you very much for your attention.

**The CHAIRMAN** I thank the distinguished representative of Japan for your statement.

The next speaker on my list is the distinguished representative of South Africa.

**Ms. J. VAN WYK** (South Africa) Mr. Chairperson, the South African delegation wishes to express our gratitude to address the Committee on this agenda item. The South African government places great importance on the link between space and society. It is for this reason that our government is leading the way in the application and development of space technology for the benefit of our society. In this regard, we would like to report the following activities and achievements which our country has accomplished over the past year.

Space technology enables us to reach remote rural areas in our country to improve human development. Since March 2000, for example, the South African government has established 86 tele-medicine sites across the country _____(?) southern Africa tele-medicine conference in Cape Town in September 2010, the South African government indicated that these tele-medicine sites offer services such as tele-radiology, tele-ultrasonography, tele-pathology, tele-ophthalmology and tele-education. Apart from these national sites, the South African government has also signed tele-medicine agreements with other African States including Namibia and the Democratic Republic of Congo.

Chairperson. Few institutions in South Africa exemplify the positive link between space and society such as Santec Limited, a South African government owned entity. Through the provision of telecommunication services to public, private and community and radio and television broadcasters, Santec daily touches the lives of millions of South Africans. Nowhere was this more vividly illustrated than during South Africa's hosting of the FIFA World Cup in 2010 when Santec performed an expanded service, that is, to the international community through the provision of communication services to FIFA and broadcasters of the event.

Chairperson. With regard to space science education in South Africa, the first intake of the Cape Peninsula University of Technology's Human Capital Development Programme to train African and South African students in satellite systems engineering using CubeSat as a model for completing their studies. These students will showcase their research by producing a CubeSat flight model at the forthcoming International Astronautical Congress in Cape Town in October 2011.

In addition to the Cape Peninsula University of Technology (CPUT), the University of Witwatersrand

in Johannesburg, with the support of the Department of Trade and Industry, host the National Aerospace Centre (NAC) which is a national focal point for academic institutions specializing in aerospace engineering with provisional coordinators. The NAC also offers academic and financial support to deserving students in the field of aerospace and space engineering. Since its inception, the NAC has supported 57 students to successfully complete their academic programme and some of these students are currently placed in local and international space industry.

With regard to space awareness, Chairperson, South Africa, through its Department of Science and Technology, organized week-long activities commemorating World Space Week in various provinces last year. These events culminated in the Space Open Day at the university in Mafikeng, the North West University, which is located in one of our less privileged areas. This particular event attracted more than 2,000 high school students who attended various lectures on space technology, space law and regulations and received career guidance on space-related professions. During the event, space engineering students of the Cape Peninsula University of Technology and the French South African Institute of Technology launched their CanSat to enthuse the intended learners. Public and private institutions such as the South Africa Council for Space Affairs, the South African National Space Agency, the Satellite Applications Centre, the South Africa Weather Service and the National Research Foundation, provided the learners with much needed practical information.

In addition to this, the CPUT and the Department of Trade and Industry co-hosted various industry seminars during the past year which brought together space engineering academics, researchers and students, government and domestic and international industry actors. Presentations focused on these events, among others, on our government space policy, our national space industry framework and the development of nano satellites.

In September 2010, the South Africa government hosted the Africa Aerospace and Defence (AAD) Exhibition, which is the largest defence exhibition on the African continent. A platform for South Africa's defence industry to identify business opportunities within our country and abroad, AAD 2010 attracted more than 300 South African and international exhibitors. One of the prominent features of this event has been its youth development programme, driven by the AAD's partners. Through this, the youth of South Africa were offered an opportunity to experience first hand the high technology world of aerospace.

In October 2010, the South Africa Space Association (SASA) hosted its inaugural conference, a private initiative which brings together South African space professionals. This Space Association aims to improve societal awareness and benefits of space technology. Subsequent to SASA's inaugural conference, a student chapter of the Association was established at the University of Cape Town.

In December 2010, this student chapter successfully launched two high powered rockets which reached an altitude of 5,100 feet. Government welcomes the platform provided by SASA for public participation in affairs.

In conclusion, the South African government remains committed to the application of space technology for the benefit of society and humanity as a whole. It is for this reason that we will continue with the development of space technology for the benefit of all humanity and that we will continue to support the work of COPUOS on this matter. I thank you.

**The CHAIRMAN** I thank the distinguished representative of South Africa for your statement.

The next speaker on my list is the distinguished representative of Venezuela.

**Mr. M. CASTILLO** (Venezuela) (*interpretation from Spanish*) Thank you Mr. Chairman As requested by the United Nations General Assembly, we are to promote education and participation of citizens in the sphere of space science and technology. The national government of Venezuela has, through the Bolivarian Agency for Space Activities (ABAE), deployed a distance learning course on remote sensing technology and analysis of geographical systems for training educational staff in the application of satellite technologies with the view of training primary and secondary education professionals with competencies in these areas, the use of satellite imagery, analysis of geographic systems, promoting the participation of the educational community in designing, executing and evaluating plans and policies at the local, regional and national levels.

The course is structured in three theoretical, practical modules based on studies of geographic environments, principles of space remote sensing, management of natural disasters: threats and risks. A platform for training was designed in a way to allow access online to information, photography, diagrams,

audio/video web pages, PDF documents, as well as services, activities, questionnaires, exams, fora, chats, and other resources. Additionally, it facilitates follow-up to the studies and interaction among teachers and functions independently on the number of users connected at the same time. It is designed in a flexible way allowing the incorporation of new training tools or functions.

During the year 2010 we trained 39 teachers in this way and they, of course, will spread this knowledge further by transferring it to their colleagues. It is important to highlight the fact that this training platform is to strengthen, not to replace, the existing full scale version of the same course presented by ABAE experts in two sessions of eight academic hours each. For the second semester of 2011, ABAE plans to implement two new courses of that kind.

Furthermore, by virtue of promoting space science and technology in the academic and scientific sphere, during 2010 ABAE participated as a presenter in the research days for the engineering faculty of the Central University of Venezuela and, days of research for schools and international studies organized by the Faculty of Economic and Social Sciences of the Central University. We presented basic information regarding international cooperation projects related to the peaceful uses of outer space as well as the origin, objectives, functions and characteristics of the governments activities in this regard.

Additionally, during 2009 and up to the present time, ABAE has deployed in ground based monitoring stations that monitor the functioning of the Simón Bolívar satellite, special activities for schools, universities, vocational schools and the general public, with a view to providing information regarding these stations and how they function. When we hold talks for children, these are additionally supplemented with recreational activities such as building a scale model of the satellite, games and various children's activities related to the space theme. During 2010, we organized 32 such talks with 1,122 participants.

The same way, during the second semester of 2011, ABAE plans such short information technology related courses for communities living close to these ground stations. As part of commemorating the fiftieth anniversary of the first manned space flight by Yuri Gagarin on 12 April 1961 and the fiftieth anniversary of COPUOS, the Popular Power Ministry for Science, Technology and Industries has, through ABAE in coordination with the Russian Federation's Embassy in Caracas, organized in April 2011 an event entitled 'Space for peace'. It included an exhibition of photography, screenings of films and the cycle of talks and lectures to promote, among children and adolescents, knowledge about the effects of the first manned space flight, as well as the accomplishments of the Bolivarian government in the use of space-based science and technology as a fundamental tool for social inclusion and sustainable development.

With reference to the use of the Simón Bolívar satellite for underprivileged communities ABAE has, in coordination with the Ministries of Education and Health of our country, implemented a tele-medicine and tele-education project designed for communities living in the Antonio Díaz Municipality of the Amacuro State, these are indigenous communities.

At the close of 2009, we established satellite links with schools and clinics, medical and educational activities for 32 information and telematic centres, installed solar panels in communities, strengthening the existing systems of light conversion energy systems to provide additional capacity building for medical institutions and the population of this area and the programme will be extended to other parts of the country.

The Simón Bolívar satellite is being used to strengthen the national seismological network in coordination with the Venezuelan Foundation for Earthquake Research (FUNVISIS) with a view to enhancing the capacity of the national government in handling natural disasters. Additionally, within the framework of the construction of the Centre for Research and Development of ABAE, we carried out physical retro-fitting of three schools located in areas close to the Centre, benefiting approximately 1,000 individuals of which 70 per cent are children and teenagers that are part of the regular educational system; 20 per cent are adults that work for the revolutionary educational system introduced by Mission Robinson y Ribas and, 10 per cent were teachers. Thank you very much Mr. Chairman.

**The CHAIRMAN** I thank the distinguished representative of Venezuela for his statement.

The next speaker on my list is the distinguished representative of Nigeria.

Ms. _____ (Nigeria) Thank you Mr. Chairman. The delegation of Nigeria appreciates the opportunity given to us to contribute to this agenda item. The National Space Research and Development Agency (NASRDA) through the African Regional Centre for Space Science and Technology Education in English (ARCSSTE-E) and the Centre for Space

Science and Technology Education, Obafemi Awolowo University Campus, Ile Ife, in Nigeria, have been making progress in involving the general public, _____(?) and students at all levels of education in its space education activities geared towards increasing awareness of the importance and benefits of space science and technology. To this end, concerted efforts are being made in promoting space-based programmes of the United Nations, within the African region, especially the English-speaking African countries. To date, over 250 participants from 17 English-speaking African countries have been trained in the space application courses at the postgraduate diploma levels.

In 2010, 27 participants from eight member countries, namely Botswana, Cameroon, Kenya, Nigeria, Sudan, Tanzania, Uganda and Zambia, have graduated from the nine-month postgraduate diploma programmes in space science and technology applications. This has further boosted total numbers that have so far acquired enhanced skills in the application of space technology in all facets of human endeavours for the region.

In collaboration with the International Committee of the Global Navigation Satellite Systems (ICG) and the United Nations Office for Outer Space Affairs, a one-month training workshop on Global Navigation Satellite Systems (GNSS) and location based services was held in October 2010. A total of 30 participants from nine African countries participated in the workshop. Furthermore, the Centre will organize a similar training workshop on GNSS for the heads of survey and mapping agencies entitled 'The applications of GNSS for surveying and mapping in Africa'. The proposed workshop will build upon the experiences of the previous GNSS workshop and targeted towards three goals: the implementation of the African reference frame; the establishment of more continuous reference stations; and, the strengthening of the network for exchange of information among mapping organizations in the region.

Over 5,000 people, students and 300 teachers from all States of the Federation have benefited from the space education awareness programmes. Deliberate attempts were made to target schools in various communities with direct or indirect involvement of community-based organizations, parents and teacher's association, school authorities and other stakeholders in society. It is worthy of note that the Centre has taken space education to the grass roots by targeting schools in some remote locations of the country.

Mr. Chairman. The impact of the Centre for Space Education programmes has been strengthened further by the use of experiments, practical hands-on activities and the establishment of school space clubs and space camps to further encourage young children to participate actively in space-related activities. New innovations were introduced to increase children and students' interest in space exploration, these include robotic education workshop series to demonstrate the behaviour of astronauts in space.

Similarly, the 2010 World Space Week was celebrated in Niger State and attended by over 1,400 participants including parents, teachers, pupils and students from different parts of the country. It was an opportunity for the Centre to reach out to the public through media events, courtesy and mobilization visits to traditional rulers, community leaders, stakeholders, and policy makers in the educational sector.

During the World Space Week, the National Space Research and Development Agency (NASRDA) collaborated with ARCSSTE-E to organize a seminar on the theme 'Mysteries of the cosmos'. The seminar targeted the general public and schools across the country especially from the tertiary institutions. Collaborative efforts are being made to reach out to other African countries to organize space outreach workshops for primary and secondary schools and the general public. Towards this objective, concerted efforts to mobilize active commitments from member countries have started yielding results. Eight countries namely, Botswana, Cameroon, Ghana, Kenya, Liberia, Namibia, Uganda and Zambia, have nominated members _____(?) to represent their countries on the Governing Board of the Centre. This will provide a platform for cooperation with the relevant ministries, agencies and institutions in these countries.

Mr. Chairman. _____(?) cooperation and harness the benefits of capacity building efforts of the Centre since its establishment in 1998, the first ARCSSTE-E regional conference and inauguration of Alumni association of the Centre was held in August 2010 with 161 participants in attendance. The objective of the Alumni conference, which had its theme as 'Engendering Pragmatic Development of Space Science and Technology in Africa: Prospects and Challenges', was to create an avenue for graduates of the Centre and other professionals in various fields of space science to discuss ways and means of harnessing and applying space technology for the socio-economic development of Africa. The specific focus of the conference is to establish a network for sharing information and also discuss ways and means of contributing to the development of the Centre.

Similarly the Space Generation Advisory Council (SGAC), in collaboration with the Centre, organized a training workshop on the use of Satellite Tool Kit (STK), a modelling and simulation software for conducting analysis on land, sea, air and space applications. A total of 30 students from tertiary institutions in Nigeria participated in the workshop.

Mr. Chairman. ARCSSTE-E is working to establish facilities for the use of distance education and e-learning to further enhance the implementation of its mandates. This will serve as a cost-effective means and an opportunity for the Centre to reach out to participants from wider geographical areas in the African region within a short time. However, ARCSSTE-E is aware that this goal can only be achieved through access to communications and adequate provision of ICT infrastructure in the African region. In this regard, the cooperation and support of member States and United Nations specialized entities will go a long way to achieving success in this endeavour.

As part of the international cooperation of ARCSSTE-E, two secondary school teachers and the staff of the Centre participated in a 10-day training programme organized by the International Centre for Theoretical Physics, Trieste, Italy. The knowledge gained from the training programme will further enhance the development of curriculum for space science education in primary and secondary schools in the Centre's member countries. Thank you.

**The CHAIRMAN** I thank the distinguished representative of Nigeria for her statement.

Is there any other delegation wishing to speak under this agenda item at this meeting? I see none.

We have therefore concluded our consideration of agenda item 10, space and society.

**Other matters** (agenda item 15)

Distinguished delegates, I would now like to begin our consideration of agenda item 15, other matters. At our afternoon meeting yesterday the Secretariat informed us about the following documents under this item. A/AC.105/C.2/L.282 and Conference Room Papers 3, 4, 5, 6, 7 and 8. I have received a request from delegations that we consider the composition of the bureau of the Committee and its subsidiary bodies later in our session.

With your permission, I would therefore propose that this morning we only begin considering the topic of organizational matters. The other topics under item 15, other matters, will be considered when we bring up this agenda item again later during this session.

Distinguished delegates, earlier this year the Scientific and Technical Subcommittee and the Legal Subcommittee considered their respective organizational matters and method of work. Decisions and recommendations are reflected in their respective reports which are before us.

I would like to bring for your consideration an action. The proposal for discontinuing of unedited transcripts of the Committee as presented in A/AC.105/C.2/L.282 before you. The Legal Subcommittee at its fiftieth session this year agreed to the proposal contained in that document. I refer you to paragraph 198 of the report of the Legal Subcommittee on its fiftieth session. With your permission I would now like to give the floor to Mr. Imre Karbuczky, Chief, United Nations Office at Vienna, Conference Management Service, and invite him to comment on that proposal.

**Mr. I. KARBUCZKY** (Conference Management Service) Thank you Mr. Chairman. Good morning, it is a pleasure to address the Committee on this proposal which is really a very welcome development and actually a rare such development these days among UN bodies. I thank COPUOS and its Legal Subcommittee to take the lead, as they did once before in 1997 when you gave up your entitlements to official records and opted for the transcripts.

Now this proposal is leading the way for other bodies in the UN, and in the UN system, to discontinue with paper-based processes. This proposal also shows the way to greening the UN and digitizing processes to the extent possible and that is very high on the Secretary-General's agenda also.

This proposal from Conference Services point of view, and hopefully you would agree with this, has only pluses. It uses a technology that is already available, these digital recordings are currently made so, as we speak, they are already taken for archival purposes. We have a very modern meetings planning and meetings management tool, developed here in Vienna and used by all four duty stations, and this digital recording feature, or module or service, will become part of that tool so it uses existing technologies. It does require a small _____(?) investment to make these recordings accessible through the OOSA website but this modest investment would

give more than double the return on investment by next year.

As I said, the technology could be offered to other bodies who are considering giving up their official records and it could be used for bodies who currently do not have written meeting records and they could have this inexpensive digital solution so it would be an additional service that we could offer to other bodies, based on your experience. This was discussed in more detail in the Legal Subcommittee and they accepted our explanation on their questions. I do not know that if, in addition to those questions that came up there, you would have any more questions, I would be glad to answer them. Thank you very much again for your consideration of this proposal.

**The CHAIRMAN** I thank Mr. Karbuczky.

Are there any delegations wishing to ask questions of Mr. Karbuczky? I see none.

Distinguished delegates, we shall now proceed to take action on the proposal contained in A/AC.105/C.2/L.282. If I hear no objections, I take it that the proposal is endorsed. I see no objections

*It is so decided*.

Distinguished delegates, we will continue our consideration of agenda item 15, other matters, on Thursday morning or earlier if the schedule of our work permits.

Now we will continue and conclude our consideration of agenda item 7, report of the Scientific and Technical Subcommittee on its forty-eighth session.

Before we proceed with the statements and, with your permission, I would first like to give the floor to Mr. David Stevens, UNSPIDER Programme Coordinator, who will brief the Committee on the proposed workplan for the biennium 2012-2013 of the United Nations Platform for Space based Information for Disaster Management and Emergency Response (UNSPIDER). If there are no objections I will give the floor to Mr. Stevens.

**Mr. D. STEVENS** (UNSPIDER Programme Coordinator) Thank you Mr. Chairman for the opportunity to present the proposed workplan for the biennium 2012-2013 of the United Nations Platform for Space based Information for Disaster Management and Emergency Response (UNSPIDER) which has been distributed as A/AC.105/2011/CRP.16.

As agreed by this Committee at its fiftieth session, we did present an initial proposed workplan to the Scientific and Technical Subcommittee at its forty-eighth session informing the distinguished delegates at the time that we would be presenting a revised workplan to this Committee during the current session, taking into consideration the level of resources actually committed to the programme by member States for 2012-2013. We did request funding support to all 192 member States through the note verbale CU2011/70 specifically requesting cash contributions for the implementation of 2012-2013 plan of work, as well as provision of non-reimbursable loans (NRLs) and associate experts needed to carry out the planned activity.

We were not fully successful in obtaining the necessary resources, much the contrary, but because of the increasing role of the UNSPIDER regional support offices due to the increasing number of established and proposed offices, only minor revisions were made to the initial proposal and we are confident that we will be in a position to successfully carry out this final proposed plan of work for the biennium 2012-2013.

Revisions in the current version include a tighter coordination with all UNSPIDER regional support offices in the provision of technical adviser support to requesting member States. A less ambitious scope for the work of the Space Aid framework and keeping the Knowledge Portal at its current level of implementation. We have maintained the same targets we had already included in the strategic framework of the programme on the peaceful uses of outer space for the period 2012-2013 which includes an increased number of countries requesting and receiving systematic and continuous technical advisory assistance for using space-based solutions and disaster management plans and policies and in the implementation of risk reduction activities, 25 countries, and an increased number of emergency response communities using space-based information.

We will certainly maintain the breadth of our work but we cannot deny the obvious fact that if we do receive additional resources we will also be able to ensure the depth of our support to countries in need, so we still hope member States consider providing the programme the necessary additional voluntary resources.

We thank all member States for taking note of this plan of work which we will be implementing

together with the UNSPIDER regional support offices and we welcome any additional considerations and proposals that would enhance the work we are going to be carrying out in the next biennium. Thank you again Mr. Chairman for this opportunity to present.

**The CHAIRMAN** I thank Mr. Stevens for that informative statement.

**Report of the Scientific and Technical Subcommittee on its forty-eighth session** (agenda item 7)

I would now like to proceed with the statements under agenda item 7. The first speaker on my list is the distinguished representative of Venezuela.

**Mr. R. BECERRA** (Venezuela) (*interpretation from Spanish*) Chairman, our delegation is aware of the present nexus of problems in relation to the space activities of States. We are also aware of the interest that this has for the S&T Subcommittee, that Committee wishes to address these difficulties and to promote a proper, viable and sustainable peaceful exploitation of outer space for the benefit of mankind by properly addressing the long-term sustainability of outer space activities.

My delegation would like to record its stance on this issue of the long-term sustainability of outer space activities. The examination of this issue should not serve as a grounds for countries which are traditionally using this resource without any restriction or control which has resulted in the problems that we are confronted with today. A reason for these countries to establish a series of control measures and limitation of access for countries which are perfectly legitimately aspiring to make use of these technologies in order to consolidate the improvements in the living standards of their peoples. This should also not prove to be an area where there would be a priority given to commercial interests over others.

This initiative is in conformity with the legal principles which govern the activities of States in outer space, the idea being to not allow the militarization of outer space. In order to reach a consensus on this issue which States could relate to, a consensus which of course must be in conformity with the principles of access and the use of outer space for peaceful purposes, this must be done on an equal footing without any discrimination of any State. If this principle is not taken into account it would be impossible to ensure success in the way that this issue is handled and addressed.

My delegation also is convinced that it is necessary for us to be attentive to the input of civil society and various civilian groups in the course of the round table discussions which are going to be provided for the debate of this issue. Given the impact that this may have on planetary development, we would like to reiterate that decisions in this regard are within the direct responsibility of States. Decisions having to do with regulation and this is truly a responsibility that cannot be delegated by States to any other entity because this is an intergovernmental, interState context, this is something we should not lose sight of.

Given the fact that outer space is the province of all humankind, the States representing their peoples must guarantee and ensure that there be no priority given to commercial interests and that one should set aside the social interests, sacrifice those social interests on the altar of a mercantile sort of approach to these issues. Thus my delegation believes that, in order to attain the sustainability of outer space activities in the long term, it is necessary for us to ensure the promotion of binding legal norms and standards, given that the existing legal framework has proved to be insufficient to ensure the viability in the long term of outer space activities.

We are also very concerned by the fact that the working document on this issue does not directly deal with the use of nuclear energy sources in outer space and deal with the direct impact that this may have of the long-term sustainable use of outer space activities.

With regard to the use of nuclear energy sources in outer space, my delegation would like to say that it attaches particular importance to the safety considerations concerning the use of such nuclear energy sources with regard to the proposals of the working group on this, as well as to the debates which were held during the forty-eighth session.

My delegation would like to make the following comments. Firstly, we would like to recall the commitment undertaken during the forty-seventh session of the Subcommittee, i.e., that the objectives of the action plan must be in conformity with the United Nations plans and programmes of action with regard to the use to be made of outer space.

Last point, last but not least, is that any extra work that could result in this initiative should involve the participation of all member States and should be the subject of approval on the part of the

Subcommittee. I hope that the Secretariat is taking due note of what we have just been saying, we believe that it is of great importance.

My delegation would like to express its satisfaction with the conclusions of the colloquium which took place at the last session of the S&T Subcommittee with regard to the working group activities on this issue. This action plan intends to promote the use of nuclear energy sources in outer space. We believe we cannot authorize the proliferation of the use of nuclear energy in outer space especially in terrestrial orbits. It is not possible to do this. Before this is done, it is necessary to quantify the potential impact on man and on our environment.

Furthermore, I would like to recall that there is no legal framework which clearly assigns responsibility and which presents the legal and technical tools which would allow us to usefully and effectively address the practical aspects of an approach in this regard. All of this is not properly organized from the security angle either. For the time being, the efforts in this regard and what is available is insufficient. We are aware of the fact that possibly it is necessary to exploit nuclear energy sources in outer space to guarantee the sustainability of certain inter-planetary missions however, we really must do more research, study further what other alternate sources of energy might be available which are safe and which have been tested and proven viable.

In the same vein, we observed the interest of some delegations to establish, as a principle, that future activities in outer space might be made dependent on nuclear power sources with an emphasis on their use in terrestrial orbits. We are convinced that to meet the essential needs of our people with a view to providing telecommunication services, including such programmes as tele-medicine and tele-education, in addition to other applications linked to Earth observation for scientific research purposes, we can count today on solar energy and will continue to count on it in the future. The use of solar energy is not oriented towards military purposes only to peaceful uses which is not the case for sources of nuclear energy particularly in the Earth's orbit.

Before we close the matter, this delegation believes it is highly risky to use nuclear power sources in Earth's orbit particularly in the light of reported breakdowns and possible collisions that pose a threat to humanity and the environment as well as the Earth's biosphere. Furthermore, we believe it is inadmissible to use nuclear reactors and/or any other source of nuclear power in these orbits based on the premise that any activity pursued in outer space must be governed by the principle of the conservation of human life and maintenance of peace. We need to further deepen research related to optimizing the use of this energy. It is indispensable that we promote a process whereby binding international norms be established to regulate the use of nuclear power sources in outer space and for this we need to strengthen interaction between the Scientific and Technical Subcommittee and the Legal Subcommittee.

Mr. Chairman. Before I move on to the subject of space debris, this delegation would like to emphasize the fact that the government of the Bolivarian Republic of Venezuela, with great responsibility, made it mandatory that at the design stage of the Simón Bolívar satellite platform sufficient fuel be envisaged to make it possible to carry out manoeuvres to remove the satellite from its orbital position after the conclusion of its useful lifetime thus making sure that this space platform could never become part of space debris in the future.

With this in mind, the delegation of the Bolivarian Republic of Venezuela believes that the progress accomplished because of the guidelines for space debris mitigation, approved by the UN General Assembly in its resolution 62/217, is important. However, this is only one stage in the technical and legal process that States must continue with a view to eradicating such debris. Hopefully the working group on sustainability of outer space activities will take these principles into account. Furthermore, in its resolution 64/86, the General Assembly stated that it was indispensable for member States to give more attention to the problem of collisions with space objects including those carrying nuclear power sources, collisions with space debris and similar objects to continue national research on the matter, to improve technology for monitoring space debris and to deepen the information we possess in that regard and to the extent possible, information should be provided to the Scientific and Technical Subcommittee of COPUOS.

For that reason, the Subcommittee in its forty-sixth session decided to continue research into the matter and make sure that member States place at its disposal all the results of their research as established in A/AC.105/933. I would like to recall what occurred in the past in the Scientific and Technical Subcommittee, the information was provided by Germany, Italy, Japan, Myanmar, Poland and Thailand. Still, we saw that there was no information provided by those States that have, for decades, generated space debris including space debris coming from platforms carrying nuclear power sources in the Earth's orbit.

This group of countries need to continue working and this should be part of the focus of the group on the long term sustainability of outer space. We need to find solutions to these vital topical problems, hope that will be so. The reason is the lack of clear requirements and the use of phrases such as, to the extent possible, also to lacunae in binding norms which creates loopholes for certain countries that traditionally have managed this technological resource without any control and now call for restrictions to be imposed on other States which, in pursuance of their legitimate right, try to use this technology to improve the living conditions of their people.

For that reason, this delegation is of the opinion, and will continue saying so tirelessly, that we should continue improving and perfecting the existing guidelines for space debris mitigation and it is indispensable that this Subcommittee increase interaction with the other subcommittee, that the two subcommittees work together with a view to promoting the development of binding international norms on these issues. Thank you very much Mr. Chairman.

**The CHAIRMAN** I thank the distinguished representative of Venezuela for your 18-minute speech. I ask distinguished delegates to concentrate their statements and to stick to the 10 minutes we already recommended.

The next speaker on my list is the distinguished representative of Mexico.

**Mr. F. ROMERO VÁZQUEZ** (Mexico) (*interpretation from Spanish*) Thank you Mr. Chairman This delegation is happy to see you again at the helm of this Committee, we know that your experience and dedication will make this session very successful and we offer you every support, yet again.

My delegation would like to express its gratitude for the excellent organization of our work, we thank the Director of OOSA, Dr. Mazlan Othman, and her very efficient staff for their excellent work throughout the year in support of the Committee and its two subcommittees and the application of the United Nations Platform for Space based Information for Disaster Management and Emergency Response (UNSPIDER). On behalf of Mexico, I would like to our condolences and solidarity with the nations of Brazil, New Zealand, Japan, United States, and other countries that suffered human loss and great material loss through natural disasters that struck their territories. These disasters point once again to the need to strengthen the use of space technologies in disaster management.

Mr. Chairman, my delegation would like to indicate that we associate ourselves with the statement made by Colombia on behalf of GRULAC. The delegation of Mexico appreciates the report of the Scientific and Technical Subcommittee on its forty-eighth session and expresses its support to the decisions and recommendations reflected in the report.

Mr. Chairman, my delegation welcomes the progress achieved during the session on the subject long-term sustainability of outer space activities. We also appreciate the setting up of a working group on this issue and offer our cooperation to Mr. Peter Martinez of South Africa in his work as chairman of the working group.

We would like to also express our appreciation for the working document A/AC.105/C.1/L.307/Rev.1 regarding the terms of reference and methods of work of the group prepared by the chairman of the working group and which incorporates the comments of many delegations. The delegation of Mexico participated very actively in the informal consultations that took place and will continue to participate actively in the working group.

The Subcommittee reached agreement which allows States to make further comments and revisions to this document which the working group will take into account in its work during the intersessional period between the STSC session and the session of COPUOS. We hope that greater agreement and consensus will be reached on these issues. This work included many steps, among others, the Secretariat sent out a note verbale inviting States to name experts for participation in the four groups of experts being set up on the terms of reference and scope, in accordance with A/AC.105/C.1/L.307/Rev.1. Mexico has nominated such experts for the four groups and will send them through diplomatic channels to make sure that the process gets underway.

Mr. Chairman, this delegation supports the activities proposed by Mr. Takao Doi, Expert on Space Applications, during the last session of STSC with a view to including, under the Programme on Space Applications for 2011 and 2012, various projects and my delegation supports the activities of OOSA regarding a number of issues. Information has been provided to us and we particularly emphasize the importance of the following projects undertaken by the Office.

Setting up regional educational and science centres in the area of space activities. With regard to these regional centres, particularly the centre for Latin

America and the Caribbean, my delegation is pleased to inform the Committee that, during 2010 and 2011, our regional centre continued offering courses of long duration on geographic information systems in its two campuses in Brazil and Mexico, as well as a number of short term courses. Right now both campuses are stepping up educational activities on geographic information systems and satellite-based communications, offering a master level course in universities throughout Brazil, Mexico, and other Latin American countries. The centre will also include in its curriculum a programme on Global Navigation Satellite Systems, developed by OOSA in cooperation with the International Committee on GNSS, and also a programme on outer space law also with the help of OOSA.

With regard to the issue of Global Satellite Navigation Systems (GNSS), my delegation appreciates the work of OOSA which acted as executive secretariat for the International Committee on GNSS. We welcome the progress accomplished in terms of moving toward the interoperability of the various global navigation systems.

With regard to the SPIDER platform on disaster management and emergency response, this delegation appreciates the work of OOSA and the offices of SPIDER in Bonn and Vienna and we welcome the start of such activities in Beijing. The regional offices will greatly contribute and share their experiences, an office will soon be set up in Latin America and the Caribbean with the support of Mexico. It will offer great support to our nations in managing natural disasters and mitigating their aftermath particularly important for developing countries.

Mr. Chairman, on the issue of near-Earth objects, this delegation welcomes the recommendation of the working group on near-Earth objects and the agreement of the Scientific and Technical Sub-committee to continue its multi-annual workplan in 2012 and 2013. We firmly support the work of the Action Team on near-Earth objects, AT 14, which is preparing its project of a report that will be disseminated to governments regarding a protocol that the governments might take into account in measures taken to prevent impact with Earth. This delegation appreciates the information provided by Action Team 14 regarding the network for information, analysis and alert and the mission group planning which will develop the necessary elements that the governments will then agree on in order to avert this serious threat to humankind.

Address such questions as, who will authorize a mission to avoid an impact and to monitor the process. We believe that the information analysis and alert network will supplement the existing network to monitor asteroids and determine the extent of risk to the Earth and humanity. International cooperation in this area is absolutely essential and it will be coordinated by the group for planning missions and operations. The delegation of Mexico thanks OOSA for participating in the sixth Space Conference of the Americas in Pachuca, 15-19 November 2010.

Mr. Chairman, the delegation of Mexico reiterates that we attach great importance to promoting international use of the Large Millimeter Telescope (GTM) in astronomic and borderline research and the possible adaptation of this as a radar for monitoring purposes to protect humanity. Thank you very much.

**The CHAIRMAN** I thank the distinguished representative of Mexico for your statement.

The next speaker on my list is the distinguished representative of Nigeria.

**Mr. A. ABIODUN** (Nigeria) Mr. Chairman, on behalf of the Nigerian delegation I thank you for giving me this opportunity to address the distinguished delegates of this Committee on agenda item 7, report of the S&T at its forty-eighth session.

At the outset, my delegation hereby joins other delegations in expressing our condolences to member States and their citizens that have gone through very trying times as a result of recent major natural disasters particularly Brazil, China, Indonesia, Japan, New Zealand and the United States.

Mr. Chairman, distinguished delegates, the rest of my statement will address four main topics namely, long-term sustainability of outer space activities, nuclear power sources in outer space, human space flight and UNSPIDER.

At the beginning, allow me in the spirit of our own celebration on the fiftieth anniversary of COPUOS at this its fifty-fourth session to recall an important decision made by this body at its forty-seventh session in 2004. That what when, in our collective wisdom, we invited the outgoing chairman of the S&T, Dr. Karl Deutsch of Canada, to formerly address this Committee at its fortieth session in 2005 on the possible future direction of the work of this Committee. If you attended the forty-seventh session of COPUOS in 2004, you certainly joined us all as we gave Professor Vladimir Kopal of the Czech Republic,

the then outgoing chairman of the Legal Committee of COPUOS, a standing ovation for his erudite recollection of the legal milestones this Committee established since it obtained its mandate from the General Assembly in 1959. Our subsequent collective response on that occasion was to invite Dr. Karl Deutsch to take the baton from Professor Kopal and point the way forward for a future that this Committee could follow. That he did, with distinction, at the fortieth session of COPUOS when he gave his special presentation on the scientific and technical aspects of the work of the Committee and the way ahead.

After some protracted debates, which I personally have tried to expunge from my memory, this Committee agreed by consensus in 2005 that it was important to consider the evolution of space activities and to consider how the Committee could develop a long term plan to enhance international cooperation in the peaceful uses of outer space.

Mr. Chairman and distinguished delegates. I just gave you a summary of how we, as a body called COPUOS, arrived at our latest and newest agenda item, long-term sustainability of outer space activities.

Today, as we all recollect here those times and that decision I believe that you should feel good about yourselves but more importantly we all owe Mr. Gerard Brachet of France, chairman of this Committee from June 2006 through June 2008, a debt of gratitude for following through with that decision in 2005. My delegation considers this new and latest agenda item of the S&T, long term sustainability of outer space activities, a very important subject for our Committee and a significant achievement for COPUOS and humankind. It is an agenda item that we need to nurture and do justice to, without the intellect and resources at our disposal, nationally and collectively. My delegation is passionate about this agenda item for a variety of reasons.

First, barely two years after obtaining our political independence from the United Kingdom in 1960, Nigeria on 3 October 1962, welcomed on its soil the largest rock from Mars to planet Earth to date, when the Martian rock made its unannounced entry and landing near the village of Zagami in the State of Katsina, Nigeria.

In spite of growing space assets today most countries, including Nigeria, have the mechanisms except for insurance coverage that are specially designed to protect these assets from potential collisions from space junk and other satellites and space vehicles in the overcrowded outer space environment. This is a major challenge to the success and sustainability of the space efforts of all of us indeed, without asking for a service, Nigeria is _____(?) with gratitude, in both January and March of last year, the assistance of the Joint Space Operation Command of the United States when Nigeria's satellite NigeriaSat-1 was on a collision path with space junk 28955 on 3 January last year and again with space junk 01716 on 8 March, also last year. These and other threats, particularly from space debris, near-Earth objects and space weather, pose safety and security issues for humankind and machines here on planet Earth and within the outer space environment and as such my delegation supports fully this new agenda item.

Mr. Chairman and distinguished delegates, the Nigerian delegation is working with other delegations to give the new chairman of the working group on long term sustainability of outer space activities, Mr. Peter Martinez of South Africa, our _____(?) support in his work. Today that work centres on our evolving, by consensus, the very reasonable and practical terms of reference and methods of work for the working group.

We call on all delegations to give of their best as we navigate through the papers and submissions before us and the ongoing informal consultations at this session of COPUOS. We are here to play a fundamental role in the work of COPUOS, not only by examining issues which we can address individually and collectively but more importantly by working together to ensure the long term sustainability of outer space activities for all humankind.

Mr. Chairman and distinguished delegates, the Nigerian delegation hereby congratulates the chairman of the working group on nuclear power sources in outer space, Mr. Sam Harbison of the United Kingdom, and the entire working group for their work. As a member of the working group, Nigeria contributed to the evolution and development of the safety framework for nuclear power source applications in outer space.

Nigeria is particularly pleased with the outcome of the workshop organized by the working group on 9 February this year. That workshop offered those member States with NPS capabilities the opportunity to share with the working group and, through it, COPUOS and the subcommittees, the efforts at their respective national levels. The status of the implementation of the safety framework and their rationale for using NPS on specific space missions. Nigeria supports the work of the NPS working group and will continue to contribute to its deliberations.

Also, as we celebrate the fiftieth anniversary of human space flight I wish to recall, on behalf of my delegation, the role Nigeria played on 20 February 1962 in support of the first manned space flight of the United States by astronaut John Glenn. I want you to see this slide - that is Nigeria tracking for the United States the Mercury spacecraft 13, named Friendship 7. To track Friendship 7 and a few other USA space travels thereafter, the United States constructed a NASA tracking station No. 5 that you see on the screen in front of you in the outskirts of Kano, Nigeria.

Depending on the orbit the Kano station provided anywhere from 3 to 6½ mini communication window with the Mercury and later Gemini spacecrafts as they passed over the African continent after leaving the Grand Canary Island coverage area. With that background, Mr. Chairman and distinguished delegates, UNISPACE III recognized, and the United Nations General Assembly endorsed, the importance of human space flight manifested today by the International Space Station which has been in the best interest of all humankind, particularly the developing countries. Today ongoing experiments in the laboratory of ISS are leading to discoveries in such areas as medicine, new materials and fundamental science that could benefit all humankind.

Accordingly, my delegation hereby extends its congratulations to UNOOSA and in particular to astronaut Takao Doi, the United Nations Expert in Space Applications, in their collective efforts to translate the UNISPACE III recommendation into a practical and an action-oriented activity. Mr. Doi himself has been there on board the ISS and fully understands and appreciates the importance of this UNISPACE III recommendation. To that effect, he and his OOSA colleagues have responded and are developing a new programme known as Human Space Technology Initiative. The programme seeks to encourage the participation of all countries in the interests and for the benefit of all humankind in the revolutionary science and technology activities that are taking place in the outer space environment within the International Space Station.

We all know now that future opportunities _____(?) directly as astronauts by non-ISS partners will be limited because of limited access to the ISS. Through this HSTI programme, UNOOSA will work with ISS partner countries, serve as an advocate for use of the ISS by non-partner countries and, in the process, help bring the benefits of this unique facility to more people in the world. My delegation takes this opportunity to thank all the ISS partners for offering their support to this UNOOSA initiative. We encourage others interested to take advantage of this unique opportunity when it becomes available, we will do likewise in Nigeria.

Finally, Mr. Chairman and distinguished delegates, I would like to touch upon UNSPIDER, the United Nations Platform for Space-based Information for Disaster Management and Emergency Response.

Let us recall that, in its resolution 61/110 of 14 December 2006, the United Nations General Assembly agreed to establish UNSPIDER as a new United Nations programme with the following mission statement, that is, ensure that all countries, international and regional organizations have access to and develop the capacity to use all types of space-based information to support the full disaster management cycle. With that background and unanimously endorsing this resolution, the GA noted with concern the devastating impact of disasters, that disasters result in loss of life and property, they displace people, rich and poor, from their homes, they destroy their livelihoods and they cause tremendous damage to societies around the world, both in the industrialized as well as in the developing countries. The General Assembly further noted that disasters reverse as well as affect and hinder current and future development efforts in all parts of the world in particular in developing countries.

On 14 December 2006 all of us and our respective countries were deeply convinced of the urgent need for enhanced coordination efforts at the global level to reduce the impact of disasters and so we unanimously, not by consensus, endorsed UNSPIDER. Between 2006 and 2009, many of our countries came forward to give UNSPIDER support but today we are dancing to a different tune. The managers of UNSPIDER, UNOOSA, are now in a cash crunch and we are looking for a miracle from them. I am surprised. Has time changed? Are we through with disasters? No one here or anywhere else on this planet Earth can predict when, where, what type, including the magnitude severity and long-term impact of the next disaster. Personally I would like that to register.

Mr. Chairman and distinguished delegates, the Nigerian delegation hereby appeals to all, including those that are supporting UNSPIDER now, those that are cutting back on their support of UNSPIDER and those that have never supported UNSPIDER to do a rethink in favour of UNSPIDER. It is not too late. Thank you for your attention.

**The CHAIRMAN** I thank the distinguished delegate from Nigeria for his statement.

We have two more statements under agenda item 7, I want to take them now and I kindly ask the presenters of the technical presentations to limit their presentations to 15 minutes. Just to concentrate a little bit, to take only the most essential slides from their presentation and conclusions.

The next speaker on my list is the distinguished representative of Germany.

**Ms. Annette FROEHLICH** (Germany) Thank you Mr. Chairman, I will be very brief and will directly refer to what our Nigerian colleague has just said with regard to UNSPIDER.

_____(?) distinguished delegate of Nigeria mentioned, you may remember that in a joint effort by UNOOSA, Germany and many other delegations UNSPIDER was established as a programme of the Office for Outer Space Affairs with offices in Bonn and Beijing. This strategic investment in the use of Earth observation is intended to serve and to benefit all nations and particularly developing countries, as was just mentioned.

UNSPIDER is a programme designed to make strategic use of space technologies to prevent harm to people. In view of increasing natural disasters in recent times, UNSPIDER has had to limit human losses and economic damage. As you may be aware, the operational and political success of UNSPIDER is due not least to Germany's commitment and I was personally involved in setting up the UNSPIDER programme in 2006. Germany is delighted by the recognition given to and the success achieved by UNSPIDER. We also appreciate that UNSPIDER has always received high praise from member States in COPUOS. Germany therefore believes that COPUOS member countries should devote considerable attention to how UNSPIDER can be implemented in the long term and on a sustainable basis for the benefit, in particular of developing countries which are hit particularly hard by natural disasters. We said this clearly in the letter of parliamentary State Secretary Hintze which was distributed to you and in our general statement which was presented by Ambassador Luedeking.

Germany believes that UNOOSA should be encouraged by the Committee to increase its efforts to raise voluntary contributions from member countries and other sources, get project money from industry and international institutions. Nevertheless, we also believe that the programme cannot be maintained on a sustainable basis in the long run without regular budgetary sources. I would like to emphasize that we do not ask for an increase in the regular budget of the UN but for a shift of priorities within the UN regular budget and we would appreciate a clear opinion of this Committee in this regard.

Germany would also appreciate it if UNOOSA could report on its efforts to put the programme on a more sustainable basis in the next subcommittee meeting because, as discussed in the donor's meeting, more transparency is needed with regard to the financial situation of UNSPIDER. Thank you very much Mr. Chairman.

**The CHAIRMAN** I thank the distinguished representative of Germany for your statement.

The next speaker on my list is the distinguished representative of Indonesia.

**Mr. C. SUPROJO** (Indonesia) Mr. Chairman, Indonesia is of the view that the implementation of the United Nations Programme on Space Applications in 2010 has enhanced the technical capacity of the participants. In this regard, Indonesia therefore would like to express its appreciation toward the implementation of the programmes to all parties involved. Furthermore, the Indonesian delegation encourages enlargement of the participants in the programme especially for developing countries. In this connection, Indonesia supports any efforts to find ways to increasing financial resources to innovative funding in addition to increased voluntary contributions from member States. Indonesia reiterates the importance of free flow of scientific information and data exchange particularly for developing countries. In this regard, Indonesia would like to propose the dissemination of the results of the workshops to websites. In addition, the conclusion of the outcome of workshops are also to be conveyed in the _____(?) COPUOS session. The Indonesian delegation also believes that sharing the outcome, during the COPUOS session, will deliver concrete results especially for those who do not have the opportunity to attend the workshops.

With regard to the matters relating to remote sensing of the Earth by satellite including applications for developing countries and monitoring of the Earth's environment, Indonesia would also like to reiterate the use of remote sensing technology shall be beneficial for all countries. Therefore, Indonesia supports the expansion of cooperation related to remote sensing technology between member countries and international organizations and equal access to the data or information for all countries with responsible expense. In this connection, Indonesia would like to inform you that it holds annual remote sensing training

courses for developing countries (TCDC) which has been participated in by some countries like Azerbaijan, Bangladesh, Cambodia, Myanmar, Pakistan, Papua New Guinea, Sri Lanka. In this case, Indonesia welcomes the triangular cooperation to organize this TCDC with other countries or international organizations.

Mr. Chairman, in the convening of UNFCC in Bali, Indonesia has committed to participate in reducing carbon emissions in the forestry sector to our EDD. Our EDD mechanism to reduce greenhouse gas emissions in cooperation with Norway, Indonesia also cooperates with Australia in the programmes of the Indonesian Carbon Accounting System using Landsat data and with geomorphologic _____(?) using _____(?) data.

With regard to space debris, Indonesia welcomes the Space Debris Mitigation Guidelines and hopes that it will be implemented based on national mechanisms in member States and based on its capacity. Furthermore, Indonesia supports the transparency of information towards the space debris and the database of space debris for disaster mitigation. Indonesia is aware that the densely populated space debris has been a serious challenge for the development of outer space technology therefore Indonesia encourages the efforts of eliminating and reducing space debris including the prohibition of research and satellite destruction weapons. Indonesia is of the view that the management of space debris and its global response will differentiate responsibility, due to a different capacity. A strong response at global level started from the local or national level, in this case Indonesia continues to promote space education and awareness for youth in the Space Week celebration every October.

With regard to the space-based system for disaster monitoring and human support. As a country located in the equatorial zone and has the characteristic of being prone to disasters, Indonesia continues to improve space application especially for disaster mitigation to minimize the loss and reduce the risk. Indonesia has sympathy for countries with the same nature therefore Indonesia would like to invite all members to benefit from and contribute to, the work of UNSPIDER and its programmes.

At the moment Indonesia is waiting for closure and strengthening of _____(?) with UNSPIDER as one of the regional support offices. Hopefully the technical arrangement could be finalized immediately. With regard to the recent developments in the Global Navigation Satellite Systems, Indonesia is of the view that GNSS is able to support the sustainable development in developing countries. Indonesia supports the application of GNSS with its compatibility and interoperability.

With regard to the use of nuclear power sources in outer space, Indonesia is concerned with the sustainability of outer space and the survival of humankind therefore, although it does not use nuclear power in outer space, Indonesia is concerned with the security, safety and safeguard of the use of NPS. In this context, Indonesia is of the view that the principle use of NPS shall be in line with international regulations including the NPT principles, IAEA safeguard and other IAEA regulations, as agreed by the members of IAEA.

With regard to the International Space World initiative, the life of humankind which now depends on outer space technology is more prone to the potential dangers of space weather. Therefore Indonesia supports the efforts to promote international and _____(?) cooperation to strengthen the _____(?) and mastery of space weather knowledge.

With regard to the examination of the physical nature and technical attributes of the geostationary orbit and its utilization and application including in the space communication as well as other questions relating to development in space communications taking particular account of the needs and interests of developing countries without prejudice to the role of the International Telecommunication Union, Indonesia is of the view that consideration of the use would allow us to reach a decision in assuring guaranteed and equitable access to the GSO according to the needs of our nations, taking into particular account the needs of developing countries as well as the geographical position of certain countries which situation is inherent in the GSO, the nature of exploitation of the GSO should be kept rational. Preference should naturally be given to countries in the tropical area.

With regard to the draft provisional agenda to the forty-ninth session of the Scientific and Technical Subcommittee, Indonesia would like to support the discussion of the agenda items which have been stagnant such as issues related to definition and delimitation, GSO, etc. to be included in the next meeting of both subcommittees and at the main committee next year. The Indonesia delegation believes that _____(?) and consensus of this agenda item could be a cornerstone for the _____(?) solution and strengthen technical relations with members. Thank you Mr. Chairman.

**The CHAIRMAN** I thank the distinguished representative of Indonesia for your statement.

We will continue our consideration of agenda item 7, report of the Scientific and Technical Subcommittee on its forty-eighth session, this afternoon.

Now, distinguished delegates, we will proceed with the technical presentations. Presenters are kindly reminded that technical presentations should be limited to 15 minutes in length.

The first presentation on my list is Mr. Takao Akutsu of Japan entitled 'Bridging space and the society - recent educational activities in Japan'.

[Technical presentation]

**The CHAIRMAN** Thank you Mr. Akutsu for your presentation. Is there any delegate who has questions for the presenter? I see none.

The second presentation on my list is by Mr. Oleksandr Dehtiarev of Ukraine entitled 'Global Space System of the Seismic Activity Monitoring'.

[Technical presentation]

**The CHAIRMAN** (*interpretation from Russian*) Thank you Mr. Dehtiarev and please also accept our condolences in view of the loss of your former director. (*continued in English*) Is there any delegate who has questions for the presenter? I see none.

We proceed with the third presentation made by Ms. Michele Clement of Australia entitled 'The Australian Space Research Programme'.

[Technical presentation]

**The CHAIRMAN** Thank you Ms. Clement for your presentation. Is there any delegate who has questions for the presenter? I see none.

Distinguished delegates I would now like to inform delegates of our schedule of work for this afternoon. We will reconvene promptly at 3 p.m. At that time we will conclude our consideration of agenda item 6, implementation of the recommendations of UNISPACE III. We will continue our consideration of agenda item 6, report of the Scientific and Technical Subcommittee at its forty-eighth session and begin our consideration of agenda item 11, space and water; agenda item 12, space and climate change; agenda item 13, use of space technology in the United Nations system and agenda item 14, future role of the Committee.

We will continue as well on Thursday with other matters, not this afternoon.

Following the plenary there will be three technical presentations. The first by a representative of Canada, the second by a representative of Ukraine and the third by a representative of Japan.

I would like to remind delegates that today from 2-5 p.m. the Action Team 14 on near-Earth objects will hold its meeting and teleconference in meeting room M7 to continue its work on the draft recommendations for an international response to the near-Earth object impact threat. There will also be consultations on space and ecosystem management organized by the delegation of Austria today from 2-3 p.m. in Room M0E19.

I would also like to inform delegates that, during lunchtime today starting at 2 p.m. in this meeting room, two videos will be screened. The first at 2 p.m. entitled '_____(?) 2010: payload rocket competition' by Indonesia and the second at 2:25 p.m. entitled 'Space activities of Turkey' by Turkey. All delegates are cordially invited to the screening at 2 p.m., those who do not take part in the other meetings.

Are there any questions or comments on this proposed schedule?

**Mr. S. CAMACHO LARA** (Mexico) (*interpretation from Spanish*) Thank you Mr. Chairman I just wanted to recall and remind members of Action Team 14 that at 2 p.m. we are meeting in M7. Thank you.

**The CHAIRMAN** Thank you for reminding us once again but I already informed the distinguished delegates.

Are there any other questions or comments on this proposed schedule? I see none.

This meeting is adjourned until 3 p.m.

*The meeting closed at 12.52 p.m.*